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ABSTRACT

Background information on Wascana Institute's (Regina, Saskatchewan) existing learning assistance programs is presented along with a proposal for a readily-accessible, one-stop learning assistance center (LAC) that will furnish the information and services underprepared adult learners require to achieve academic success. First, introductory material traces the history of learning assistance at Wascana, presenting information on the admission and enrollment of underprepared students in health sciences and nursing programs and on the first proposal for a learning assistance program and center in 1980 and resulting summer bridge reading/study skills and training assistance programs. The next sections define the services encompassed by "learning assistance," examine the primary functions of a LAC, and offer ten assumptions about learner development. Mission, goal and objective statements for the LAC are followed by a description of systems for learning assistance and a discussion of requirements for professional staffing, space, equipment and furnishings, and program materials. Finally, information on funding, implementation, and evaluation is provided, and concluding LAC proposals are presented. Enrollment data, job descriptions, and an extensive bibliography are included. (EJV)

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LEARNING ASSISTANCE PROGRAM: A PROPOSAL

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1987

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ABSTRACT

Nationwide, post-secondary education classes are riddled with students who lack the necessary basic skills to succeed in their career programs. Wascana Institute has attempted to counter the effects of the decline in reading skills by designing and implementing a multimedia self-instructional delivery system for adult reading development.

However, Wascana's remarkably successful reading program does not meet all of the needs of those it is meant to serve: underprepared students entering Wascana, including specially admitted students, students on probation, re-entry students, physically disabled and learning disabled students, academically and socially disadvantaged students, and students for whom English is a second language, are so deficient in all basic skills that success in their academic courses is highly unlikely.

This proposal, then, is an attempt to provide a rationale, a structure, an operating philosophy, and an implementation strategy for a readily-accessible, one-stop learning assistance centre that will furnish the information and services these underprepared adult learners require to achieve academic success. Additionally, it is hoped that the learning assistance support system described herein will build the necessary framework to effect change for institutional effectiveness, efficiency, growth,and survival of the existing programs and functions of Wascana Institute.

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INTRODUCTION

With a growing number of non-traditional and academically disadvantaged adult learners entering Wascana Institute, it is a fact of academic life that each year a higher percentage of these students will require the comprehensive and intensive services of a basic skills support system in order to succeed in their career training courses. This proposal presents data collected over the past several months and suggests a course of action which, it is hoped, will gain the support and cooperation of administration and faculty for these special offerings.

To begin, it is helpful to gain some historical perspective. When reviewing the literature examining learning assistance at Wascana, it is apparent that groups of students identified as underprepared have been admitted to Health Sciences programs for several years; for example, the figures in Appendix A are evidence that underprepared or high-risk students have been enrolling in nursing education classes for a long time. Their admittance can be attributed to the over-expansion of technical education vis-a-vis university education, to the expressed desire by educators to provide educational opportunities to a wider range of students, and to fluctuating entrance requirements which tend to be institution-specific, lessening the need for adequate preparation.

However, underprepared students will not disappear from Wascana programs; nor can Wascana restrict admission to only the best prepared students: there are too few of them. In 1980, for

example, it was revealed that:

> ...diagnostic testing procedures at Wascana Institute have consistently identified 30 to 35 per cent of the first-year Health Sciences' students as high-risk in that they performed below grade 10 on a standardized reading test (Ast, 1978, 1979). In fact, conservative estimates range from 30 to 50 per cent of all first year applicants fall into the "exit prone" or high-risk category. Consequently, attrition rates for high-risk students are very high. For example, from 30 to 40 per cent of the students discontinued from full-time Health Sciences programs at Wascana over the past two years of testing and record keeping were previously diagnosed as high-risk. As of June 12, 1980, of the 108 students discontinued, 40 or 37 per cent fell into this category (Burns, 1980, pp.4-5).

Perhaps because of an acknowledged need and/or a genuine desire to enhance student achievement, in June, 1980, a proposal was made to establish a learning assistance program and centre at Wascana Institute. The proposal stated that:

1. A Learning Assistance Program and Centre be established at Wascana Institute, subsumed under the aegis of the Associated Studies Division. This course of action follows the precedent of many other Colleges and Institutes in the country with similar programs. The physical placement of the Learning Assistance Program Centre needs to be in a convenient and centrally located campus facility and will need: (a) a basic skills improvement laboratory with individual carrels for auto-tutorial work; (b) classroom space for lecture instruction in study skills, math, tutorial composition and reading efficiency and comprehension classes; and (c) semi-private space for individualized tutoring, advising and counselling.

2. The importance of an official, published statement as to the Institute's development/remedial philosophy cannot be discounted. Therefore, it is proposed that such a statement be prepared

and published as a prelude to the establishment of a Learning Assistance Program and Centre.

3. All new students admitted to the Institute be tested in basic skills, Appropriate recommendations would then be forwarded to individual Program Supervisors as to testing results and the need for the Learning Assistance Program. Referrals during the academic year will also be accepted from the faculty and, on an individualized basis, assistance will be provided.

4. All high-risk students whose achievement on a standardized reading test is less than grade 10 but greater than grade 8 be required to complete a program in reading, comprehension and study skills during a summer bridge program as a prerequisite to their admission to an Institute program.

5. All prospective students whose achievement on a standardized reading test is less than grade 8 be referred to the Adult Basic Education courses offered by the Community College....

6. As the Institute moves toward adapting full-time programs to accommodate part-time students, particularly high-risk students who have discontinued from regular programs, careful consideration must be given to providing them with an opportunity to improve their basic skills. Consequently, it is proposed that all students required to discontinue from full-time programs because of academic reasons and allowed to register as part-time students be required to complete a Learning Assistance Program.

7. Institutional credit be granted to all students who complete the Learning Assistance Program, as well as any other developmental/remedial course that is offered through the Learning Assistance Centre.

8. Extensive use be made of existing courses in an effort to provide preparatory courses for students lacking prerequisites for Institute courses (Burns, 1980, pp.9-10).

As a result of this proposal, a summer bridge reading/study skills program for Health Sciences students which began in 1978 continued to be offered each year during July and/or August; and, a more

comprehensive approach to learning assistance began in late 1984 when Training Assistance Programs were implemented at the Albert South and Winnipeg North campuses. Although there have been some successes with these programs, serious inadequacies exist in that the present offerings of learning assistance do not meet all of the needs of those they are meant to serve (Appendix B).

Inadequately prepared students are still enrolling at Wascana Institute, and it is significant that since the number and diversity have increased, the range of entering students has expanded. Consequently, an even greater percentage of these new students is now designated as underprepared (Appendix C and D). In fact, many of these students are so deficient in basic reading skills that success in their career programs is highly unlikely (Appendix E). Today, therefore, it is not uncommon to find thirty to forty percent of entering students reading, and thus comprehending, below the eighth grade level.

To date, learning assistance programs, i.e., Training Assistance Programs, have been established at almost all Wascana Institute campuses to assist underprepared students. Since few learning assistance programs are perfect, however, and since Wascana's Training Assistance Programs are no exception, there is an urgent need to reconsider the concept/philosophy of learning assistance and how it is being delivered on Wascana campuses. To that end, this proposal will look at what learning assistance is, what a

learning assistance centre should be, and then it will suggest the structure, operating philosophy, and implementation strategy for a truly individualized, self-instructional, multi-media system of learning assistance for Wascana Institute.[1]

LEARNING ASSISTANCE

The term "learning assistance" has evolved from and may encompass the following descriptors: remedial reading, developmental reading, speed reading, study skills, reading/study skills, and academic skills. Also included in the concept of learning assistance are the educational functions inherent in such terms as improvement, remediation, development, instruction, and counselling, which are conducted in places such as classes, clinics, laboratories, and centres.

Learning assistance also comprises the world of the learner. Hence, the learning environment is made up of the learner, the learner's instructors, other students, training courses, administrative procedures and regulations, as well as locations such as classrooms, shops, learning resource centres, and libraries. In addition, it may involve the inner world of personal problems that impinge upon and affect an individual learner's attitude toward learning.

Learning assistance, furthermore, is concerned with basic educational skills and attitudes such as learning to keep on

learning, and learning to learn (Bundy, 1965; Gerard, 1967). Equally important, learning assistance is concerned with developing the habits of study, which may very well be the preconditions of learning (Dubin and Taveggia, 1968). Thus, "learning assistance differs from content instruction in its emphasis, not on facts and information, but rather on the learning process and on the attitudes and skills of the individual learner" (Christ, 1971, p.33). It should be obvious that, to achieve success not only in their career training programs but also in their career occupations, students must possess these learning assistance attitudes and skills. Listed below, therefore, are some of the components that might be included under the umbrella term "learning assistance attitudes and skills."*

A. STUDY MANAGEMENT:
   1. Time Management
   2. Task Organization
   3. Study Environment

B. MAJOR COURSE-RELATED SKILLS:
   1. Study Reading
   2. Listening/Notetaking
   3. Taking Exams
   4. Writing Assignments

C. AUXILIARY COURSE SKILLS:
   1. Library Research
   2. Vocabulary
   3. Spelling
   4. Writing
   5. Speaking
   6. Beginning Reading Skills
   7. Computation Skills
   8. Critical Thinking

D. ATTITUDES, INTERESTS, HABITS:
   1. School Attitudes and Motivation
   2. Comprehension and Rate

3. Concentration
4. Memory
5. Reading Habits and Skills

E. PHYSIOLOGICAL ASPECTS:
1. General Health
2. Vision
3. Hearing
4. Stress

*Adapted from Frank L. Christ, 1971.

LEARNING ASSISTANCE CENTRE

For the purposes of this proposal, a facility where learners go to effect change in their learning assistance attitudes and skills, particularly in the areas of reading, writing, computation, and study skills is referred to as a learning assistance centre. In addition to one centralized operational facility at an institution, other smaller learning assistance centres could be located on other campuses of the same institution.

Although the primary function of a learning assistance centre "is to help students to learn more in less time with greater ease and confidence" (Christ, 1971, p.35), it may include other functions, such as:

1. A place where the learner gets tutorial help. It is ideal for such activity because it has learner-oriented equipment, software, and personnel.
2. A referral agency to other helping agencies. The learning assistance center could act as a central point where students can be diagnosed, referred, and

monitored in a follow-up to ensure that all of their needs are taken care of.

3. A library of basic aids for content area materials. The learning assistance center, working in conjunction with the content areas, could house drill materials, collateral textbooks, learning guides, and even course outlines.
4. A training facility for paraprofessionals, student counsellors, and tutors. Relief instructors, student advisors, and tutors could be given in-service training in the learning skills development field.
5. An information clearing-house for administration, faculty, and staff. It could publish a newsletter that might serve not only to ameliorate the negative attitude toward learning assistance on campus, but also, it could effect good public relations between institute personnel and learning assistance faculty (Christ, 1971).

LEARNER DEVELOPMENT

A number of assumptions, which might be considered as statements of the obvious, seem to have been forgotten when learning assistance programs were being established throughout North America during the last twenty years. Yet, these ten assumptions are vital to the functioning of an effective learning assistance program, and especially to the preparation of this proposal (Ast, 1982: Burns, 1980; Christ, 1969).

1. Learning begins where the student is. Post-secondary students are regarded as children instead of adolescents and mature adults. Instructors fail to collect adequate biographical data on their students. Personal academic advising between instructor and student is almost non-existent. Course objectives, class outlines and student learning guides are full of errors,and instructional techniques remain questionable. Thus, the student as learner is forgotten.
2. Learning "how to learn" can and must be learned. If learning, both in and out of an institution, is contingent upon skills in time and task management, reading, writing, and computational skills, for example, can educators afford to minimize or omit training in these skills? If the content of subject areas such as drafting, motor mechanics, graphic arts, and telecommunications is undergoing constant change in this era of the "information explosion" and technological advancement, will students be prepared to cope with new learning if they have not learned how to learn? Since learning "how to learn" is not being systematically developed in the educational system, the need exists for post-secondary institutions to offer reading and study skills improvement programs that are focussed on learning skills.
3. Learning must be meaningful and goal-oriented. Before any learning skill or technique is required of students,

its rationale, particularly performance objectives, must be explored. Before any survey or test is taken by students, reasons for the diagnosis and consequences of test performance should be discussed whenever possible. Students do learn better when they understand what they are doing, how they are doing, and why they are doing it.

4. Learning how-to-learn is a process. Learning is not just something for students to know about; it is something that they do. It is a dynamic interactivity occurring within students as well as between and among students and instructors. Learning, particularly in reading and study skills programs, is not listening to someone talk about learning skills: it is a technique rather than information. And, it results in something that students do rather than in something they know.

5. Learning how-to-learn is not always easy, nor is it always fun. For a few, learning a skill or technique is fun; it is quick, and it is satisfying. For most others, however, learning a skill or technique is boring, slow, and unrewarding. It involves repetition, analysis, and change followed by more repetitions, analyses, and changes until the expected performance of a skill or technique is achieved. The fun or self-satisfaction occurs only when the skill or technique is used expertly and easily in the learning resource centre when the student is preparing for a test, or in the testing centre when the student is writing an exam.

6. Each student is a unique person. One textbook/learning guide, one set of exercises, one type of activity, one learning sequence, or one instructional method is never adequate for any program in which two or more students are enrolled. A diagnosis of individual needs, aptitudes, abilities, and limitations, reinforced by analytical observations of skills and techniques, will move the concerned reading/study skills instructor to explore the possible usefulness of many different standardized tests and surveys, how-to-study manuals, reading exercise workbooks and kits, programmed instructional materials, and audio-visual instructional components so that each student is helped to learn at his/her own pace, in his/her own way, and at his/her own level of activity.
7. Each student is also a fellow human being. Sometimes course instructors maintain a posture that separates them from their students. They forget that students have feelings. They play the role of an elite -- enlightening, censuring, rewarding or punishing students as they meet their instructional demands. They forget that every person hides a complex human being who wants and needs support, sympathy, encouragement, and respect. Instructors need to reach out more humanly to help students learn.
8. Students can and do learn by themselves. Self-directed activities work if they are systematized and rigorously programmed according to a student's needs and abilities. Ideally, the instructor initiates and guides each student

during the beginning stages of an activity. The instructor also explains and counsels the student as problems arise during his/her performance and encourages him/her to persevere at his/her task. Finally, the instructor, in conference with the student, determines subsequent learning sequences.

9. Computerization need not be dehumanizing. When the computer is used as part of a learning system, it can assist both the instructor and the learner through its ability to store, process, and respond to data instantaneously. Computer-aid-to-instruction and computer-managed-learning can release instructors to devote more of their time to individual students. Computers do not replace instructors; they assist them.
10. Diagnosis, referral, and follow-up are inseparable from learning. The instructional loop begins with diagnosis which attempts to determine where the student is. Concomitant with diagnosis is feedback, preferably individual and personal. Based on this feedback, the student should be referred to an activity or sequence of activities for remediation or development. The instructor monitors and follows up the referral to achieve optimum results for the student and to prescribe further diagnosis or activity. The absence of any one of these three activities severely limits the effectiveness of instruction.

These assumptions are the necessary starting point from which one must begin to organize, develop, implement, and eventually

sustain a true learning assistance program.

LEARNING ASSISTANCE PROGRAM

A clear, concise, and comprehensive statement of mission is the baseline from which to begin the development of a true learning assistance program; it describes the reason for its existence, and it must be consistent with the mission of the Institute. Since missions are usually stated in global terms, it is suggested that the mission statement of the learning assistance program at Wascana be:

> To mobilize for effective and efficient utilization by students, staff, faculty, and administration all existing campus, community, and Institute resources -- including people, facilities, equipment, materials, programs, research, and information -- to support individuals, departments, or other campus groups who desire to learn more in less time with greater ease and confidence (CSULB, 1980-81).

Goal statements, such as those listed below, serve to delineate the general areas of the mission's activities:

1. To assist learners to learn by providing accessible environments for a dynamic interface with equipment, materials, and learning facilities.
2. To prevent learning failures and to increase learning sophistication in personal learning skills by providing opportunities for learners to "learn to learn."
3. To recruit and train personnel for learning assistance programs and services.
4. To publicize programs and services of the learning assistance program to students, faculty, staff, and administrators.

5. To continue to adapt the learning assistance program to the needs and expectancies of Wascana consistent with the articulated goals and available resources of the Institute.

6. To demonstrate the viability of the learning assistance program as a campus change agent in developing and implementing approaches to learning and instruction that are individualized, personalized, cybernetic, mathemagenic, and accountable.

Objectives form the basis for determining what activities should be performed and also help to establish criteria for evaluating how well they are being performed. Accordingly, the following objectives add substance, direction, and measurability to the activities performed by the learning assistance program:

1. To continue the physical development and training programs of the learning assistance centre and other mini-centres.

2. To develop tutorial and learning assistance services on all campuses.

3. To further expand the learning assistance materials collection.

4. To present at least five learning skills workshops each semester.

5. To collaborate with the Student Services personnel in designing and providing learning skills programs for special needs and E.S.L. students.

6. To recruit, train, and offer experience for two potential adjunct individuals in tutoring and learning skills facilitation.

7. To support faculty and staff development in the area of learning skills facilitation.

8. To implement at least two public relations activities that reach Institute personnel.

9. To complete a learning assistance program administra-

tive handbook.

10. To demonstrate the efficiency and effectiveness of the learning assistance program by the evaluation of its products, services, and results.

The learning assistance program should publish annually a statement of its missions, goals, and objectives. The statement should be reviewed by the Assistant Principal--Programs and the Principal prior to each budget presentation. This annual statement should be developed by the coordinator and presented for acceptance to the total learning assistance program faculty; subsequently, it is reviewed by the total learning assistance faculty, providing feedback and input for the next year's statement. Without such a document, program implementation, growth, and improvement cannot be monitored or measured.

In addition to an ongoing evaluation of program objectives, the coordinator should be concerned with developing and using a system to monitor both throughput and usage of resources. "These data. as they are accumulated, sorted, and analyzed, can be useful as an index of accountability when presented to a budget panel or incorporated into an annual report" (Christ, 1977, p.82). Such data contribute to an ongoing monitoring system that alerts the coordinator with regard to the effectiveness and efficiency of the learning assistance centre's operations.

SYSTEMS FOR LEARNING ASSISTANCE

At Wascana Institute, a true operational system of learning assistance does not exist; the Training Assistance Program, as it is presently structured, operates in a vacuum as an instructional extension of the Associated Studies Division. Essentially, learning assistance is a support service that is totally learner-centered with a diagnostic/prescriptive rationale that specifically attends to those problems that impair learning efficiency. As such, a learning assistance centre, managed by one administration, must coordinate its services with other departments/divisions, but it should not be part of any one of them.

Thus, a learning assistance support system exists mainly to provide the services needed by students to achieve success. And, in order to assist the greatest number of Wascana students to develop their learning potential in a more systematic and personal way, it is essential that elements of systems design be introduced and adapted to the existing Training Assistance Program.

Design Characteristics of a "Systems Approach":

1. A learner-oriented system, first of all, must emphasize specific, observable attitudes and behaviors (Mager, 1962; Johnson and Johnson, 1970).

2. The system would also make explicit both an analysis and a synthesis of existing information, time, methodologies, and equipment to determine current interrelationships and seek new, more effective interrelationships. Some of these interrelationships involve both data sharing and coordinated learning assistance strategies among Institute offices and departments such as the Registrar's Office, Student Services/Public Relations, health nurses, student instructors/advisors, program supervisors, and chairpersons (Silvern, 1968); Banathy, 1968).
3. Provisions must exist in the system for feedback, both for individual behavioral and "attitudinal" reconstruction and for program evaluation and subsequent improvement, i.e., cybernetics (Weiner, 1950; Smith and Smith, 1966).
4. The learner must have available instructional options that include lectures, both in person and on audio cassettes; learning material such as books, recordings, films, programmed instruction, and computer-assisted instruction; learner groupings ranging from one as in auto-instruction, to pairs either of learner and instructor or learner and peer learner, to small groups for encounters and discussion. In addition, learner options would include choices of time patterns and actual learning times (Christ, 1971).

5. The learning assistance system must offer materials in space modules and learning units so that the learner has choices from among different options. Thus, the learning facility would include the area, furniture, and equipment for individual study, for tutorial pairings, and for small group instruction. And, the materials collection would make available cassettes, filmstrips, slide programs, and programmed instruction in addition to modular workbook materials (Christ, 1971).

6. The term "mathemagenic behavior" has been used to describe learner responses that give birth to learning. These learner responses are almost always overt behaviors; thus, the learner speaks, writes, or interacts with his/her learning material to promote learning. This reactivity or responsiveness must be built into an instructional module; if not, the module has to be modified to include it (Rothkopf, 1966).

7. Above all, the coordinator must ensure that the learning assistance system be open to change. Professional journals, bulletins, newsletters, and research reports must be perused for new ideas. Learning assistance personnel must participate in professional associations, and they must constantly experience new materials and equipment, experiment with new learning methods, and exchange ideas with colleagues. Above all, they must maintain their relevancy by dialoguing with learners

and using their criticisms to modify existing materials, facilities, and programs (Christ, 1971).

The System:

A systems approach to reading/study skills instruction means a movement away from traditional methods to personal, individualized student learning. A systems approach can be defined as:

> ...a systematic attempt to coordinate all aspects of a problem toward a specific objective. In education and training this means planned, organized use of learning resources for achievement of required behavioral objectives by the most efficient means practicable. This precludes the teacher-centered approach. No longer may content and pacing of "today's lesson" be left to the whim of the individual classroom instructor. The systems approach means focusing first upon the learner and the performance required of him, and then, and only then, making decisions about course content, learning experiences, and choice of most effective media and instructional tactics (Curl, 1967, p.39).

The diagnostic/prescriptive reading/study skills system (SR/SE II) that is suggested for implementation at Wascana and which is described below considers audio-visual materials, programmed instruction, simulation, and the use of the computer as integral components of a learning system. The unique features of this system include the following principles (Christ, 1969). The SR/SE II:

1. identifies a wide range of reading/study attitudes, habits, and skills;

2. gives to the student and instructor instant feedback by means of an easily read profile with a further capability of delayed feedback through an individualized and personalized computer print-out;
3. programs a student into appropriate reading/study skills tests, exercises, materials, and related activities for specific remediation or development;
4. provides for student and instructor a follow-up routine as well as repeated interaction;
5. allows for instructor modification of recommendations as new techniques and materials become available;
6. permits a wide variety of pedagogical approaches as determined by computer analysis of data on large groups of respondents.

The SR/SE II can be administered during an orientation program or at any time during the student's program to initiate the student into the learning assistance centre which is actually a number of centres where reading and study skills materials -- workbooks, manuals, programmed texts, tapes, records, filmstrips, films, and tests -- are available for student use under the direction of a learning assistance practitioner. Ideally, the learning assistance centre, in order to serve the needs of all students, should include a reading lab, a writing lab, a speech improvement lab, a mathematics lab, and an English-as-a-Second-Language Service.

In summary, therefore, a true learning assistance centre is a

place where learners, learner information, and learning facilitators are interwoven into a sequential, cybernetic, individualized, people-oriented system which uses a systems approach to service all students and faculty of any institution for whom learning by its students is important (Christ, 1971). Thus, the learning assistance support system proposed herein would function as a willing partner with other Divisions of Wascana, exemplifying the best practices of a systems approach.

PROFESSIONAL FACULTY/STAFFING COMPLEMENT

Personnel is the single most critical resource for the development, implementation, maintenance, improvement, and expansion of a learning assistance program and its services. Therefore, the nurturing of a professional faculty, i.e., faculty who aid students to learn, is seen as an obvious priority. That being the case, each of the various learning assistance positions will have a written job description that is reviewed periodically (Appendix F). It is the coordinator, reporting directly to the Assistant Principal--Programs, who is responsible for recruiting, selecting, training, and supervising assigned personnel. And, a hallmark of a true learning assistance program is its emphasis on on-the-job training for all of its personnel.[2]

Learning assistance personnel, furthermore, should meet every week to review administrative details as well as programmatic and operational aspects of the learning assistance program. This

review will follow an established agenda that is based on a special checklist kept by each of the faculty. Agenda items might include some or all of the following: calendar of upcoming activities for the week; budget report; personnel concerns; training needs; status of equipment, materials, and facilities; programs and service ideas; public relations activities; evaluation data on the centre; and, the current status of annual objectives.

SPACE REQUIREMENTS

The space allocated for learning assistance at each campus should be analyzed to determine if its location and arrangement are operationally efficient for program effectiveness. Questions that should be asked to determine this are: "What activity or activities will occur in this space? What and how many pieces of equipment (carrels, screen, bookshelves, cabinets, chairs, etc.) are needed to implement these activities? How are these furnishings best arranged to facilitate these activities? What activities can share the same space? What other considerations (security, visibility, noise, movement) impact on the design and furnishing of this space?"

In terms of the present Wascana operation, it would seem that the coordinator should be located at a campus facility where adequate space is available for most of the program equipment and materials, as well as program records. On the other hand,

faculty with instructional assignments at other campuses will have to be allocated work space at the campus where the majority of their instructional assignments will take place; obviously, this will require extensive faculty travel between campuses.

PROGRAM EQUIPMENT AND FURNISHINGS

Accountability for program equipment and furnishings can be measured against three concerns: (1) acquisition in sufficient quantity to implement and maintain program activities; (2) security from theft, damage, or unauthorized use; and (3) cost-effectiveness (Christ, 1977).

Acquisition involves searching for and liberating equipment and furnishings that stand idle or are stored in various campus locations. It also means keeping a "wish-book" of needed items so that when an unexpected budget bonanza is announced, this planning immediately yields the item name, catalogue number, cost, specifications and vendor (Christ, 1977).

Security, on the other hand, means taking routine measures to insure that equipment is not stolen (Christ, 1977). The use of attachments designed by local technicians as well as commercially available lock-downs should minimize equipment loss. In addition, a daily inventory of all equipment will lessen the chance of equipment being stolen. It may also mean that learning assistance personnel will have to be assigned responsibility for the operation

of special equipment. And, cost-effectiveness of both equipment and furnishings can be achieved through a purchasing plan that minimizes the need for stockpiling different replacement parts, through the purchase of equipment that is easily maintained and repaired by campus technicians and, lastly, through proper maintenance on a scheduled basis (Christ, 1971).

PROGRAM MATERIALS

The selection of program materials is the responsibility of the learning assistance faculty who are actually working with student learners. As well, the acquisition of program materials should reflect a diagnostic/prescriptive approach to learning skills development. Therefore, whenever possible, materials should be previewed before they are adopted; this means experiencing the program material both as a learner and as a learning assistance facilitator with at least one student (Christ, 1977).

A learning assistance centre's collection of program materials should represent a variety of print and media formats at different levels of readability and listenability. The collection should be comprehensive, covering skills such as time management, task organization, study/reading, listening-note-making, test taking, writing, computation (mathematics), memory training, vocabulary, spelling, and library/resource centre usage (see pages 6 and 7 -- "learning assistance attitudes and skills").

FUNDS

Since education has reached an era of accountability, budgeting has become more and more a process of programmatic justification. Thus, input (funds and other resources) must match output (number of clients served, reduction of attrition, salvaging high-risk students). Corporate terms like return on investment, zero based budgeting, cost-effectiveness, and cost benefit analysis are being used more frequently in budget announcements and performance reviews (Christ, 1977). To cope with this approach in program budgeting, the coordinator of a learning assistance program needs a management system that can be described as:

> ...a total system of management, an attempt to incorporate all the things a manager ought to be doing into an organized effort. It is not any one of the many tools a manager will find helpful from one situation to the next; it is the whole toolbox (Deegan and Fritz, 1975, p.15).

The proposed system of total management to be utilized in the learning assistance program is known as MBO, or management by objectives. As stated above, measurable objectives are the ways and means of achieving program outcomes that are desirable as well as possible and hence, this is the system that should be adopted for the learning assistance program.

IMPLEMENTATION AND EVALUATION

It is suggested that for Wascana Institute, implementation of the proposed learning assistance program be done in two stages:

(1) a Phase-In Stage, and (2) a Demonstration Stage. Formative and summative evaluations should be conducted during and at the end of each stage and, at the end of the Demonstration Stage, an evaluation report, along with appropriate recommendations, will be forwarded to the Assistant Principal--Programs.

Critical Path:

End of March, 1987	- approval of proposal - acceptance of recommendations
End of April, 1987	- assignment of learning assistance centre facilities in all Divisions - completion of individual job descriptions and faculty instructional assignments
End of May, 1987	- completion of professional development plan
End of June, 1987	- completion and approval of curriculum materials by Division
End of September, 1987	- completion of any revisions to the professional development plan
End of November, 1987	- identification of learning assistance courses and faculty/staff for the Demonstration Stage
End of December, 1987	- completion of Phase-In Stage
End of January, 1988	- completion of Phase-In summative evaluation - completion and approval of curriculum materials by Division
End of May, 1988	- completion of Demonstration Stage
End of June, 1988	- completion of Demonstration Stage summative evaluation
End of August, 1988	- completion of learning assistance program final evaluation report

Phase-In Stage:

A two stage implementation strategy will allow for the evaluation and feedback considered critical to the development of the program. The first stage, the Phase-In Stage, will utilize the existing faculty and courses and will form the nucleus for the continuing academic activity of the program. In other words, because the existing learning assistance program (Training Assistance Program) has already identified two of the courses which fall into the developmental area of learning assistance, it would seem appropriate to focus upon the refinement of those courses during the proposed Phase-In. That being the case, current faculty would continue to instruct in those areas, which are reading and mathematics.

During the Phase-In, attention will be directed to the development of a diagnostic/prescriptive reading/study skills system and referral process for complete implementation during the Demonstration Stage. It is anticipated that this true learning assistance program will employ individualized, self-paced learning materials reinforced by personalized instruction as well as group demonstration techniques to facilitate the delivery of this service (see pp.16-19).

Because of the need for additional research, development, and specification of a learning assistance philosophy within Wascana Institute, a plan of action for a "systems approach"

to learning assistance will be promoted during the Phase-In Stage. This plan will include an operational system, staffing and facility requirements, identification of additional program materials and equipment, and a complete implementation strategy. The report will be available at the end of May, 1987, and it will be forwarded with recommendations to the Assistant Principal--Programs. Necessary faculty/staff recruitment and reassignments will be identified before September, 1987, and preparation for the implementation of the Demonstration Stage should be complete by the end of November, 1987.

Demonstration Stage:

Ideally, the Demonstration Stage will include a full implementation of the proposed learning assistance program. This, of course, will be subject to the modifications, deletions, budget restrictions, and additions imposed by the Assistant Principal on this proposal and, subsequently, the evaluation of the Phase-In. That being the case, a complete description of the "systems approach" to be fully effected during the Demonstration Stage will not be revealed at this time.

It should be understood, however, that much of the activity to be conducted during the Demonstration Stage will be determined as a result of the Phase-In. It is only through a planned process of evaluation and documented feedback

that the actual program and/or services can be identified for implementation. Therefore, the Demonstration Stage will, as the name implies, demonstrate the likelihood of success of a true systems approach to learning assistance.

Evaluation:

It is suggested that formative evaluations be conducted at specified intervals during the Phase-In and Demonstration Stages. These will provide valuable feedback for necessary design changes in the structure and/or operation of the learning assistance program. A summative evaluation is proposed at the conclusion of the Phase-In with specific recommendations for conducting the Demonstration Stage to be forwarded to the Assistant Principal for his ratification and approval.

Formative evaluations are also proposed for the Demonstration Stage. The feedback thus obtained will be used to improve the delivery of learning assistance material and programs to the various Divisions of the Institute. As well, a summative evaluation will be conducted at the conclusion of the Demonstration Stage with the results and recommendations forwarded to the Assistant Principal. An additional report, focussing upon the entire project, will be prepared by the end of August, 1988.

Specific evaluation instruments to be used during the Phase-In and Demonstration Stages have not been determined and/or designed. It is intended, however, that these instruments and the evaluation implementation strategy will be in place by the end of September, 1987. Feedback, in the form of evaluation data, will be solicited from a wide range of faculty, staff, administrators, and students within the Wascana Institute community.

CONCLUSION

This proposal has attempted to come to grips with the challenge of introducing a true system of learning assistance at Wascana Institute. It is hoped that this has been achieved to the extent that a structure, an operating philosophy, and an implementation strategy have been revealed. The purpose of the proposal was not simply to find potential courses or areas of academic involvement for a learning assistance program within the existing Training Assistance Program; it was to identify "...a social activity involving people, ideas, methods, machines, communications, and various interacting systems" to service all of the students and faculty of an institution for whom learning is important (Shure, 1965, p.375).

Feedback from administration, faculty, staff, and students during the last few months indicates that a new philosophy and delivery of learning assistance for Wascana's Training

Assistance Program is imperative. To that end, the systems approach described in this proposal is, in fact, an attempt to provide the necessary support for the existing programs and functions of the Institute. Thus, if Wascana Institute is serious about offering learning assistance to its students, it will move quickly to ratify the following proposals.

PROPOSALS

It is proposed that:

1. A true learning assistance support system and centre be established at Wascana Institute. The main centre should be located at the Winnipeg North Campus, with mini-centres located at all of the other Wascana campuses.
2. The learning assistance program be implemented in two stages, with formative and summative evaluations during each stage, and with a final evaluation report at the end of the last stage.
3. A statement of the missions, goals, and objectives of the learning assistance program be published annually. Without such a statement, program effectiveness and efficiency cannot be monitored or measured. And, to ensure that the learning assistance program meets its specified outcomes, it is suggested that the Management by Objectives system be adopted for total program management.

4. The Institute appoint a Coordinator of the Learning Assistance Centre who is directly responsible to the Assistant Principal--Programs. It is suggested that the Coordinator be someone who has had professional training in learning assistance program management (Appendix G), and it is further suggested that the Coordinator implement a "systems approach" to reading/study skills instruction so that the needs of the greatest number of Wascana students will be met in the most efficient and effective way.
5. All present Training Assistance Program faculty (and any other eligible Institute faculty) be transferred to the Learning Assistance Centre.
6. All students seeking admission to Wascana Institute programs be tested in basic skills. The test results would be sent to the Chairpersons of each Division. Henceforth, learning assistance would be provided only on a referral basis: it is the Chairpersons who are responsible for the quality of Wascana "graduates" and, therefore, it is their responsibility to ensure that students requiring learning assistance be referred to the Learning Assistance Centre for further assessment and assistance.

ENDNOTES

[1]Most of the material in this proporal can be found in published literature and research on learning assistance, reading and study skills improvement, individual differences, learning theories, instructional technology, systems design, and adult education. For that reason, an extensive list of references is provided. Also, a great deal of the material contained herein comes from the writings of, and personal contact with, Frank L. Christ, Director, Learning Assistance Support System, California State University--Long Beach.

[2]There is a need for the professional training of post-secondary reading/study skills specialists, i.e., learning assistance practitioners. Since there is no facility in Canada to train learning assistance professionals, it is suggested that any Wascana instructor who is to work in the Learning Assistance Centre be accepted for on-the-job training in the learning assistance program.

APPENDIX A

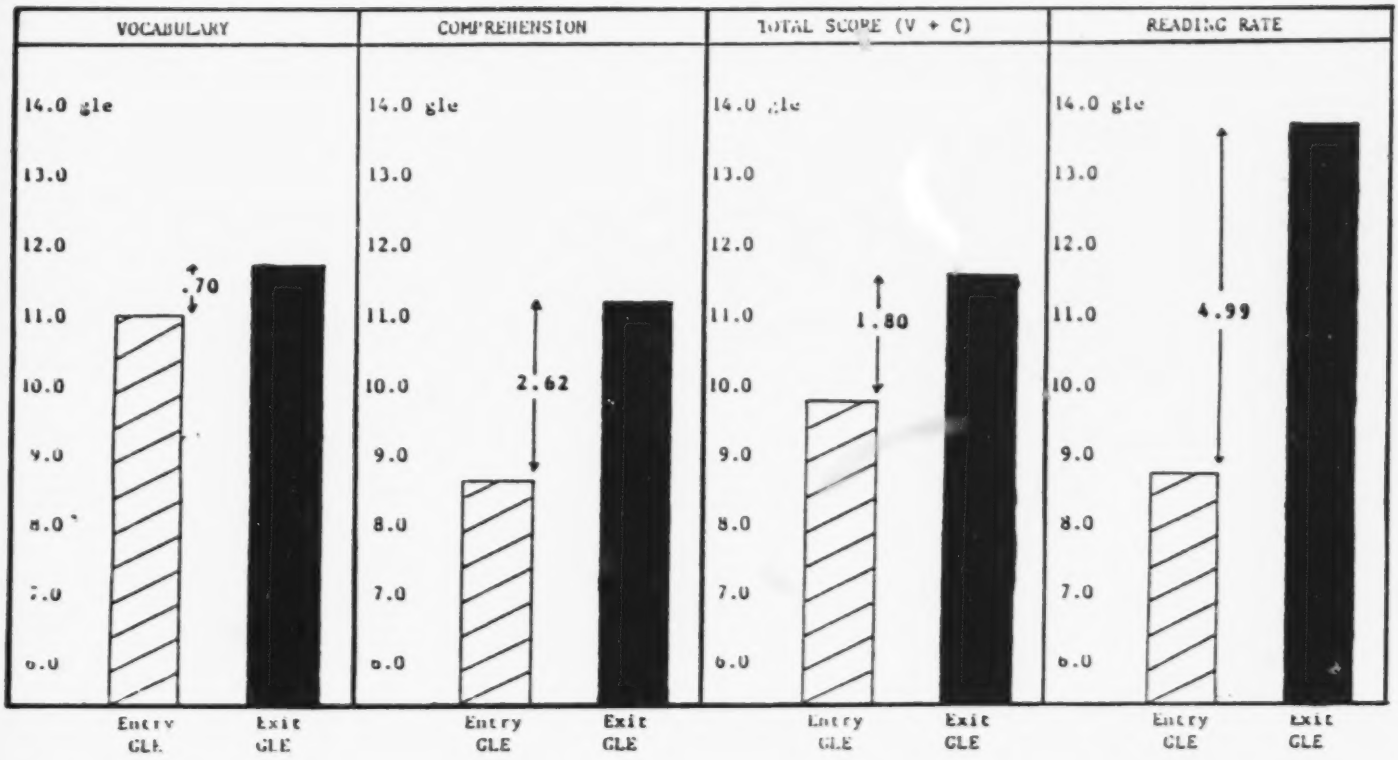
Reading test results for the Health Sciences Division 1975 to 1980 inclusive.

YEAR	NUMBER TESTED	DEFICIENCIES	PERCENT
1975	176	105	59
1976	285	77	27
1977	281	114	40
1978	329	144	43
1979	343	133	38
1980	360	149	41

On average, approximately 41 percent of the students had reading deficiencies (using Grade 10 as the demarcation between having or not having a reading deficiency).

APPENDIX B

AVERAGE GRADE LEVEL IMPROVEMENT
FOR READING PROGRAM STUDENTS IN
30 HOURS



*GLE = Grade Level Equivalent

Applicants, by program, that were given the Nelson-Denny Reading Test between January 18 and December 13, 1985.

PROGRAM	NUMBER OF APPLICANTS	READING DEFICIENCIES	PERCENT
AGRICULTURE	55	38	69%
AUTOBODY	87	51	58%
BARBERING/ HAIRSTYLING	63	40	63%
BUILDING OPERATION AND MAINTENANCE	23	13	56%
CARPENTRY	63	38	60%
DRAFTING	85	40	47%
ESTHETICIAN	29	12	41%
GRAPHIC ARTS	111	48	43%
HORTICULTURE/ LANDSCAPING	51	19	37%
MACHINE SHOP	48	29	60%
MAJOR APPLIANCES	43	26	60%
MOTOR VEHICLE MECHANICAL REPAIR	118	74	62%
OCCUPATIONAL CHOICES	88	64	72%
PAINTING AND DECORATING	38	22	57%
PHOTOGRAPHY	56	18	32%
PLUMBING	46	31	67%
RECREATION VEHICLE REPAIR	47	24	51%
TELECOMMUNICATIONS TECHNICIAN	106	34	32%
WELDING	78	53	67%
TOTAL	1235	674	55%

Albert South Campus TAPS - READING AND MATHEMATICS

Applicants, by program that were given entry-skills tests between January 1 and December 31, 1985 and between January 1 and September 26, 1986.

Year	Program	No. of Applicants	Entry Skill	Deficiencies Major	Minor	Percent of Applicants with Deficiencies
1985	Secretarial Studies	306	Reading	19	102	40%
			Math	50	176	74%
	Business Programmer	89	Reading	4	27	35%
			Math	10	56	74%
	TOTAL	395	Reading	23	129	38%
			Math	60	232	74%
1986	Secretarial Studies	200	Reading	6	65	36%
			Math	12	116	64%
	Business Programmer	28	Reading	1	6	25%
			Math	2	16	64%
	TOTAL	228	Reading	7	71	34%
			Math	14	132	64%

APPENDIX E

STUDENT	PROGRAM	PRE-TEST	RE-TEST
A1	Building Systems	Grade 7.8	Grade 5.2
A2	Welding	11.2	8.2
B1	Recreation Vehicle	8.9	6.8
B2	Occupational Choices	8.7	5.8
B3	Carpentry	8.7	4.5
B4	Autobody	7.5	4.0
B5	Drafting	6.0	6.0
C1	Telecommunications	8.6	4.8
C2	Major Appliances	10.7	5.2
D1	Horticulture	12.1	7.5
D2	Agriculture	8.3	5.6
E1	Graphic Arts	10.2	4.7
F1	Painting/Decorating	9.3	5.8
F2	Drafting	7.9	4.2
F3	Plumbing	8.8	6.3
F4	Plumbing	6.0	5.8
F5	Plumbing	7.9	5.6
G1	Autobody	6.0	5.1
H1	Horticulture	10.9	8.2
H2	Horticulture	11.8	7.5
H3	Graphic Arts	9.1	5.6
I1	Painting/Decorating	9.8	6.0
I2	Drafting	9.1	6.0
I3	Painting/Decorating	6.0	2.9
I4	Recreation Vehicle	9.3	8.2
I5	Welding	7.9	7.8
I6	Machine Shop	8.1	6.8
J1	Major Appliances	7.7	5.8
K1	Building Systems	7.8	6.8
L1	Photography	13.1	5.4
M1	Major Appliances	9.8	6.6
M2	Painting/Decorating	6.0	4.5
M3	M.V.M.R.	6.9	3.1
M4	M.V.M.R.	7.9	4.7
M5	M.V.M.R.	6.6	3.6
N1	Recreation Vehicle	8.1	4.6
O1	Graphic Arts	10.2	5.8
	Average: Grade	8.6	Grade 5.7

Students applying for admission to Wascana Institute programs are pre-tested by means of a standardized norm-referenced reading test. However, after a student has been admitted into a Wascana program and registers for a reading skills development program, he/she is re-tested with a diagnostic/prescriptive instrument so that specific problem areas can be identified and a skills program developed that will ensure success.

APPENDIX F

PROPOSED LEARNING ASSISTANCE CENTRE FACULTY JOB DESCRIPTION

Position Title

Instructor Technical Institute, Learning Assistance Program

Primary Function

To facilitate the learning activities of student learners toward the attainment of learning assistance objectives.

Major Responsibilities

1. Instruction -- facilitation:

   (a) provide adequate educational experiences to help learners to learn to learn;

   (b) assist learners on a one-to-one basis and in small groups to develop, interpret, and transmit ideas well;

   (c) provide on a one-to-one and small group basis experiences to develop reading, problem solving, critical thinking, study skills, and computational skills;

   (d) present learning skills workshops/seminars in campus classrooms and other organizational meeting areas.

2. Learning environment management:

   (a) establish a climate conducive to effective learning;

   (b) establish clerical routines to minimize interruption to the instructional--facilitative process.

3. Guidance:

   (a) assist learners in dealing with academic, personal, and social problems affecting their learning;

   (b) work in cooperation with other faculty and counsellors to help alleviate problems of individual learners.

4. Institute organization and administration:

   (a) contribute worthwhile suggestions for the improvement of the learning assistance program;

   (b) ensure that required reports or other materials needed by administration are kept correctly and presented on time.

5. Professional development:

   (a) engage in approved learning assistance studies and activities to improve professional competence;

   (b) join and support professional learning assistance organizations.

6. Institute--community relations:

   (a) work with community organizations in order to be aware of the learning assistance needs of the community;

   (b) participate in a variety of community activities to promote the Institute image and to expand contacts in the community.

Organizational Relationships

1. Responsible to the Coordinator of the Learning Assistance Centre and the Assistant Principal--Programs.

2. Carries out instructional duties as assigned by the Coordinator.

3. Cooperates with other faculty.

APPENDIX G

PROPOSED DUTIES OF A COORDINATOR OF THE LEARNING ASSISTANCE CENTRE

Reporting to the Assistant Principal--Programs, the incumbent is responsible for the day-to-day supervision of the faculty and staff of the learning assistance centre.

		Percent of Time
1.	Supervises and provides on-going training to all learning assistance personnel. This includes daily briefings, weekly administrative meetings, and other administrative sessions as needed.	25%
2.	Develops, supervises, and monitors the learning assistance objectives and the implementation of the annual management by objectives plan.	10%
3.	Supervises the training of adjunct learning assistance professionals, tutors, and other staff.	10%
4.	Consults with student learners including on a one-to-one basis through diagnosis at an intake interview, prescription of programs and materials, and follow-up in skill development.	15%
5.	Consults with instructors, program supervisors, and chairpersons in the development of learning assistance programs, materials, and services.	20%
6.	Attends Institute management and division meetings.	10%
7.	Prepares the annual report, program reports, budget requests, faculty/staff evaluations, and other documentation and correspondence.	10%

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